Letter and enclosure from Alexander Graham Bell to Mabel Hubbard Bell, March 2, 1909

Beinn Bhreagh, near Baddeck, Nova Scotia. March 2, 1909. Mrs. A. Graham Bell, 1331 Conn. Ave., Washington. Dear Mabel:

I enclose a copy of some correspondence with Mr. E. L. Jones, the editor of Aeronautics, and with Messrs. Funk & Wagnalls, the publishers of the Standard Dictionary, respecting the meaning to be assigned to the word "aerodrome".

We have just received a telegram from Casey relating to his lecture or address before the Canadian Club of Toronto. It reads as follows:—

Baldwin to Bell

Montreal, March 2, 1909:—Record meeting Canadian Club. Very enthusiastic over first Canadian flight. Leaving Montreal twelve this morning.

(Signed) Casey.

Yesterday (March 1) we tried the endurance of the new Curtiss engine to see whether it could be relied upon for a run of half an hour in case we should invite the Aero Club of America to come up here and witness an attempt to win the Scientific American Trophy for the second time by a flight in the Silver Dart of sixteen miles. I felt that it would not be safe for us to issue such an invitation unless we tested the engine and had reason to believe that it would not become overheated before that distance had been run.

At forty miles an hour it would take twenty-four minutes to run sixteen miles, so that I felt that we should have some assurance that the engine would run for at least half an hour without being overheated. Yesterday (March 1) the engine 2 was p I aced on the ice boat

and Douglas and Mr. Bedwin started on a trip on Baddeck Bay. After travelling for only four minutes a jet of steam from the radiator showed that the water was boiling and the engine had to be stopped.

We had another radiator for cooling the engine and this was tried today. The ice boat made a speed of about forty miles an hour and this was kept up for twenty minutes. The engine was then stopped and the radiator was found to be still cool so that there is every reason to believe that the engine with this radiator has endurance enough for the tests.

The 9 ft. propeller for Cygnet II has been completed and will be tested upon the ice boat. If it gives a satisfactory push the engine and propeller will be immediately installed in the Cygnet II and another trial of that aerodrome will be made. A.G.B.

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CORRESPONDENCE ABOUT THE DEFINITION OF THE WORD "AERODROME".

Jones to Bell

New York, Feb. 20, 1909:—Enclosed please find definitions of the words "aerodrome" and "aerodromics", and I have written Funk & Wagnall's as per the enclosed copy.

(Signed) E. L. Jones.

Funk & Wagnalls to Jones.

New York, Feb. 17, 1909:—Replying to your enquiry I take pleasure in giving you the definitions of the terms "aerodrome" and "aerodromics" as printed in the Standard Dictionary.

"<u>Aerodrome</u>, n. A mechanism for gliding on the air, consisting of supporting surfaces, means for propulsion and other adjuncts".

I give also the etymology of aerodrome for your guidance if needed. Gr., combining from of, air, the atmosphere, a running, from run.

"Aerodromics, n. The art of gliding on the air by means of an aerodrome".

Trusting that this information may prove useful to you, we remain,

Very truly yours, (Signed) Funk & Wagnalls Co. per Frank (something) Lexicographer.

Jones to Funk & Wagnalls

New York, Feb. 20, 1909: —Please accept thanks for your letter of Feb. 17. The definitions you enclose exactly coincide with 4 2 the opinion held, until lately, by Dr. A. Graham Bell.

While at Hammondsport one eveining, we were talking over the eymology of aeronautical terms and subsequently, Dr. Bell studied up the greek words and decided that "aerodromics" might properly be defined as "travel through the air" and the word "aerodrome" to apply to a course over which flying machines and airships might race.

The word "aerodrome" is popularly used now to designate grounds where flying machines and airships are tried out or raced. For instance, the Morris Park Race Track in New York City leased by the Aeronautic Society. This definition has come into use by comparison with the word "hippodrome" which means a place where horses are exercised and raced. The two words seem to be analogous.

Another, but incorrect use of the word "aerodrome" is a shed or building housing flying machines or airships. This is in use particularly in France.

The word "aerodrome", meaning the machine, defined as per your letter, was put into practice by Langley who called his steam model an "aerodrome", and the word "aerodromics" was the name he gave to the art of flying by his machine.

Inasmuch as the International Aeronautical Federation adopted, last year, a set of words covering the Art, I hope that the next edition of the dictionary will give correct definitions of all the terms relating to this new Art.

In this magazine, we are using the word "aerodromics" as meaning "travel through the air" and "motor aerodromics" as "travel through the air with a self contained power plant".

I forwarded your very kind letter to Dr. Bell for his information. (Signed) E. L. Jones.

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Bell to Funk & Wagnalls March 2, 1909. Messrs. Funk & Wagnalls, 44 E 23rd St., N.Y. Gentlemen:—

I am glad to note from your letter to Mr. Ernest La Rue Jones, dated February 17 1909, that the Standard Dictionary defines the word "aerodrome" as follows:—

Aerodrome, n. A mechanism for gliding on the air, consisting of supporting surfaces, means for propulsion, and other adjuncts.

This is exactly the sense in which I have always used the term; and was also, I believe, the meaning assigned to it by the late Prof. Langley.

I have been publicly criticized for applying the term to the flying machine itself, instead of to the shed or building in which it is housed. A meaning that has lately been introduced into this country from France, and which appears to me to be incorrect. This meaning has been defended on the ground of analogy to "hippodrome"; but the analogy is not correct, for a hippodrome is not a place where horses are simply housed or kept (a stable), but a place where they are run.

It has recently been proposed to use the term "aerodrome" to designate the grounds where flying machines and dirigible balloons are run or raced. This meaning, although less

objectionable than the application to the building where the machines are stored, seems to me inappropriate, for the "race track" of the flying machine is the air itself and not the ground.

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2 Fortified by the definition in the Standard Dictionary I shall continue to use the word "aerodrome" for the flying machine itself until such time as some other meaning has been authoritatively defined. At present I believe that the wrod is not to be found in any dictionary excepting in this sense.

In order to avoid the awkwardness of using the word in three distinct meanings I shall speak of "aerodrome-track" (or "aerodrome-park) for the place where aerodromes are exhibited and raced; and "aerodrome-shed" (analogous to balloon-shed) for the building in which they are housed. It would be unfortunate, I think, to use in this connection the word aerodrome alone, as it has already an established meaning in the sense of the machine.

The members of the Aerial Experiment Association, of which I am chairman, have become so accustomed to this meaning of the word "aerodrome", that we habitually abbreviate it to "drome"; and speak of our flying machines as Drome No. I, Drome No.2 etc. We are even beginning to use the contraction as a verb (to drome, droming etc.); and I notice that the newspapers the other day, in referring to Mr. McCurdy's recent flight in the aerodrome "Silver Dart", spoke of him as "circum-navigating, or rather circum-droming Baddeck Bay".

I enclose for your information a communication I made to the members of the Aerial Experiment Association, Dec. 29, 1908, entitled "An Important Conference at Hammondsport" which shows the origin of the discussion now going on in regard to the meaning to be assigned to the word "aerodrome".

Yours sincerely, (Signed) Alexander Graham Bell

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IMPORTANT CONFERENCE AT HAMMONDSPORT.

(From A.E.A. Bulletin No.XXVI p 9)

<u>December 29, 1908</u>:—On Sunday evening (Dec. 20) the following persons were assembled in my room at the Hammondsport Hotel:— Messrs. Curtiss, McCurdy, Means, Jones, Kimball and myself. Of course we talked of flying machines, dirigible balloons, aerodromes, aeroplanes etc. etc.

One subject on which we all seemed to agree was that the terminology of Aeronautics required revision, and especially that the word aeroplane, as the name of a machine which had no plane surfaces in it, was inappropriate and incorrect. Discussion developed the point that there was much less objection to the word aerodrome than I had supposed and Mr. Jones suggested the adoption of the term as a designation for heavier-than-air machines generally, including the so-called aeroplanes, helicopters and ornithopters.

It is probable that this little conference at Hammondsport may lead to important results. Mr. Jones proposed that if we could all agree upon a suitable terminology he would adopt it in his journal "Aeronautics", and Mr. Means gave the impression that he too might adopt it in further issues of the Aeronautical Annual.

I expressed the opinion that Langley, the introducer of the word "aerodrome" limited the term to the class of flying machines now commonly spoken of as aeroplanes; and expressed a doubt as to whether the etymology of the word would render it applicable to helicopters and ornithopters. We tried to find a dictionary in Hammondsport that should define its meaning but the word was not contained in any 8 2 dictionary accessible to us. I asked Mr. Jones to hunt the word up in the Standard Dictionary and let me know how it was defined as I had the impression that the dictionary limited the term to machines supported by gliding flight.

I had always had the idea that the word "aerodrome" had been coined by Langley by compounding together two Greek words aero (air) and dromos ("a course, race, running; flight; a fleeing; escape)". The word "dromos" being derived from "dramein" the infinitive of a verb meaning "to run", "to move quickly"; it is obvious that the root meaning of "aerodrome" is "air runner".

I find, upon examination, that I was mistaken in supposing that the word "aerodrome" originated with Langley. The Smithsonian correspondence has revealed the fact that Prof. Langley corresponded with Prof. B. L. Gildersleeve, the distinguished Professor of Greek at Johns Hopkins University concerning a suitable name for his machine.

In a letter to Prof. Langley, dated, Oct. 30, 1909, Prof. Gildersleeve says:—

"The word you want is made to your hand in <u>aerodrome</u> (aero-dromes) "air runner". ***No one will have anything to say against a Greek word that is found in the Lexicon".

Again under date, November 4, 1890, Prof. Gildersleeve says:—

"To my mind "-drome" connotes swiftness, as the "dromedary", is the "swift camel". The main thing is to get a word of fairly classic formation, fairly suggestive (not exhaustive) of the thing, and wholly easy of pronunciation. Modern Scientific nomenclature is based on definition. Hence the awkwardness to begin with, and the inadequacy to end with.

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3 It thus appears that the word "aerodrome" was suggested by Prof. Gildersleeve and adopted by Prof. Langley. It is not a new word artificially compounded from "aero" and "dromos", but is an old word in actual use by the Greeks and to be found in every Lexicon. Everyone, therefore can get the proper definition for himself by consulting a Greek Dictionary. I have just examined a Greek Lexicon and find the following two words bearing upon the subject:—

Aerodromeo, "to traverse air".

Aerodromos, "traversing air".

These are the meanings of the words as used by the Greeks; and I have therefore written to Mr. Jones that there appears to me to be no impropriety in extending our meaning of "aerodrome" to cover all flying machines of the heavier-than-air type as he suggested or even to include dirigible balloons. In fact the word "aerodromics" might, consistently with its Greek meaning replace the word, "aeronautics" itself, so as to cover the whole field; and such a word would be more appropriate than aeronautics, for balloons and flying machines are not analogous in any respect to ships and they all "traverse the air". A.G.B.